DEVOTED TO AGRICULTURE AND ALL ITS KINDRED ARTS AND SCIENCES.

Agriculture not only gives riches to a nation, but the only riches she can call her own.—JOHNSON.

VOL. II. SATURDAY, JANUARY 19, 1850. NO. 2.

S. W. COLE, EDITOR. QUINCY HALL, BOSTON. J. NOURSE, PROPRIETOR.

AGRICULTURAL MEETINGS.

ON Tuesday evening of last week, the first agricultural meeting was held at the State House. By some mistake, the meeting was called a week before the appointed time — on the second Tuesday of the month, instead of the second Tuesday of the session. On this account, the meeting was not large, but it was quite respectable as to numbers, and still more so as to the zeal and interest that were manifested in the great cause that claimed attention.

The meeting was organized by the choice of the following officers: Hon. William B. Calhoun, President; Hon. John Daggett, Hon. George S. Boutwell, and J. M. Earle, Esq., of Worcester, Vice-Presidents; Mr. Buckminster, of the Ploughman, Mr. Cole, of the N. E. Farmer, Mr. Punchard, of the Traveller, and Mr. J. C. Moore, of the Atlas, Secretaries and Reporters; Hon. William B. Calhoun, Samuel Carpenter, Esq., of Attleborough, and Paoli Lathrop, Esq., of South Hadley, Business Committee.

As Mr. Calhoun was absent, Mr. Daggett was called to the chair, and presided.

Voted, To commence the meetings at 7 o'clock, and close at 9 o'clock, precisely.

Voted, That the speaker who opens the discussion of a subject, be limited to thirty minutes, and the speakers that follow, to fifteen minutes.

On suggestion, the president announced that the general subject of agriculture was open for discussion. Several gentlemen made desultory remarks on various branches of this subject, particularly on the great improvements that have been made in this country; the various improvements of which agriculture is susceptible; the importance of education, connected with progress in this art, &c. There seemed to be a general feeling in favor of having lectures before the meetings, a part of the time this season.

"Agricultural Education" was proposed and accepted for discussion at the next meeting.

IMPROVE WET LANDS.

In many cases, gravel or sand can be hauled on to wet lands more conveniently in winter, as the ground is frozen, than at any other season; and, with the farmer, this is usually a less busy season than any other. If the gravel be taken from the bank, the ground's being frozen will not be any serious hindrance.

Gravel is the best article for the improvement of wet lands, as it is porous, and allows of ready drainage; next in order is sand, and then loam. Even clay and mud are advantageous, as they cover up vegetable matter, and cause it to decay and form rich vegetable mould; and they serve also to elevate the surface and promote drainage.

In some cases, low lands are too moist merely from their locality, or lowness and flatness, that prevents drainage, the soil being light and porous. Such lands, after being well drained, would be benefited by clay, mud, or loam, rather than by more porous substances.

In many cases, gravel or sand is not only necessary to elevate the surface of wet land, and render it drier by more thorough drainage, but herdsgrass, and other productions, need silex or sand to give firmness to the stalk. When a soil consists wholly of mud or vegetable matter, the grass often falls down before fully grown, while the soil contains all the elements of nutrition excepting silex, which is indispensable to the perfection of many plants, particularly herdsgrass, redtop, cane, Indian corn, wheat, rye, and other plants of firm stems.

MANAGEMENT OF BEES.

As the days are becoming longer, and occasionally more mild, bees require extra care, else they will come out on warm days, and becoming chilled by cold winds, they will fall upon the snow and perish; for they are suddenly affected by the cold snow, and cannot recover.

The most simple mode of preventing this evil, is to shade the hive; then the bees will usually keep within, until it is warm enough for them to go at large without danger. In a warm location, the sun will often strike with considerable force upon a hive, which, with the natural heat of the swarm, will make the hive so warm that the bees will be induced

to come out when they are unable to endure the cold winds.

Without regard to the loss of bees in this way, it is far better to keep them shaded in winter, to avoid the extremes between cold nights and the warm sun of noonday. By keeping them in an equilibrium of temperature, as far as possible, the bees will be in a more healthy state; and, as they will lie dormant, they will consume far less honey than will be required when they are occasionally active.

By very exact experiments, in weighing bee-hives weekly, we have found that a swarm would consume honey much faster in July or August, in time of severe drought, when the flowers afforded no honey, than in the coldest months of winter.

We have put feeble swarms of bees, that had only a few pounds of honey, into a cellar, early in winter, and let them remain till spring, when the weather was sufficiently warm for them to go abroad; and the difference in the weight of the hive, at the time of putting it into the cellar and taking it out, was not perceptible, without weighing.

Bees require attention, but they are often neglected. A friend of ours had seven hives of bees, early in winter, which he put into a closet, in a central part of the house, where the temperature was nearly even, and they were all in good condition in the spring. The same season, another apiarian had six hives, which stood out in a shed, open at the south, exposed, during the winter, to occasional hot sun, cold winds, and the most rigorous cold by night, and one extreme often following another in rapid succession. The consequence of this improvidence was, a loss of one half of the swarms.

Large Hogs. — Major Daniel Tenney, of Sutton, sends us the following account of the weight of hogs raised and slaughtered by Mr. Daniel Day, of Northbridge: Two hogs were killed November 2, 1849, when fifteen months old, and weighed one thousand and sixty-one pounds. Two others were killed December 27, 1849, when sixteen months and twenty-seven days old, and weighed one thousand two hundred and fifty-nine pounds. As productions so large must be, in a great measure, the result of skill in management, we should be pleased to have Mr. Day's mode of feeding.

The next Patent Office Report. — The Commissioner of Patents has employed Dr. Daniel Lee to aid him in the preparation of the Patent Office Report, assigning to him the Agricultural Department of that office. Dr. Lee has edited the Genesee Farmer, and Southern Cultivator, with distinguished ability, and we are pleased to learn that so able assistance is employed in a document that may be made the medium of diffusing a large amount of highly valuable matter, but which has often been burdened with selections without taste or judgment.

CATTLE MARKETS.

For some time past, a cattle market has been held at Cambridge on Wednesdays. We understand that the sales at Cambridge are as large as those at Brighton; and, from the superior advantages of the location, it is supposed that Cambridge will become the principal market. It is on the Fitchburg and Lowell railroads, which, with their extensions and ramifications, run great distances into different parts of the country. The cattle driven from Maine pass through Cambridge, when on the way to Brighton.

We have engaged an able reporter, to give us an accurate account of this market, condensing the markets of the two weeks into one, with remarks that will show when there is any change from one week to the other.

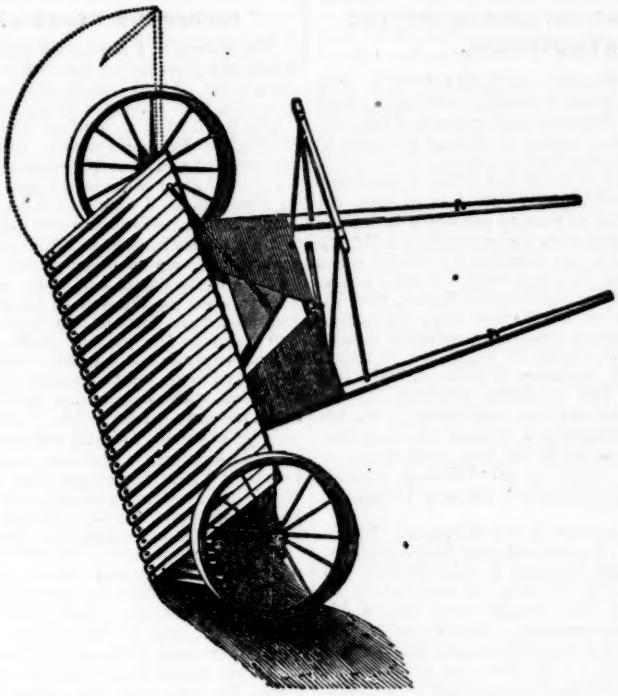
Bureau of Agriculture. — Our attention has been particularly called to the suggestion that a certain gentleman should be placed at the head of the Bureau of Agriculture, should one be established at Washington. We would observe to those who make these suggestions, that we consider it altogether premature to nominate candidates for professorships before they are established, and that it is a movement that will have a tendency to defeat the whole plan. We hope that nothing further will be published on this subject at present.

Maple Sugar. — A good man will make six or seven hundred pounds in three or four weeks. The man that took the premium at the State Show at Auburn, N. Y., in 1846, kept all vessels clean. He run the hot sugar into conical vessels, having a half-inch hole, plugged at bottom, until the sugar was thoroughly hard; then put three layers of woollen cloth on top, and poured on a pint of water every morning, for three weeks in succession. The water looked like brown molasses, and the sugar, when done, like loaf sugar.

MOSS UPON APPLE-TREES.

We suppose it is a fact that no apple-tree that is covered with mosses can be considered a healthy tree. It is, however, a matter of doubt with us, whether these mosses fasten upon the tree while it is vigorous and healthy, and reduce it to a diseased state; or whether it is necessary that there should be some diseased condition of the bark, before it will afford suitable ground for them to flourish in. These mosses or lichens are, to the trees on which they flourish, what lice are upon animals. Their effects upon the vegetable system are analogous to the vermin above named upon the animal system. It is, therefore, necessary, in order to insure a perfectly healthy circulation to the tree, that they should be removed and destroyed.

Diffusion of Seeds. — In boring for water, at a spot near Kingston-on-Thames, some earth was brought up from a depth of three hundred and sixty feet. This was carefully covered with a hand-glass, to prevent the possibility of any seeds being deposited on it; yet, in a short time, plants vegetated from it.



INDEPENDENT HORSE RAKE.

This rake was invented by Calvin Delano, East Livermore, Me., and patented by him, Feb. 1849. It is fitted to the hind wheels of a single horse wagon, and tended by a man or boy, who can *ride and rake*, and manage the horse with ease and certainty. As each tooth acts separately and independently, being suspended by a rod or hinge over the axletree, it is peculiarly adapted to *rough land*, as any tooth may rise over an obstruction without disturbing others. It works well also on smooth land.

The following remarks on this rake are from Hon. Moses Newell, West Newbury, one of the best practical farmers in Essex county: —

"I formerly used the revolving and spring-tooth rakes, and I think Delano's possesses all the valuable qualities of both the others, and has other improvements that add greatly to its value as a labor-saving implement. Among them are the following: It requires only one hand to tend the rake and drive the horse, and a feeble man may accomplish the work without much effort. It leaves the hay in better condition for cocking than the revolver; and is not liable to the objection made to the spring-tooth rake, by incorporating dust with the hay. A horse works it easier than he does either of the others; and it is moved from field to field like a cart, at any ordinary speed, carrying a crew of hands upon it. The teeth are less liable to be broken; and the horse being harnessed in the shafts, he never steps upon the rake, as he is frequently liable to do in backing, when harnessed to the revolver. It can be used on uneven or stony land, across dead furrows, or lengthwise of them, with the same certainty of raking clean, as on a level surface; and the whole ground is raked over as effectually as it would be by a hand rake.

"I hardly know how this model can be improved upon for the purpose for which it is designed. The rake accomplishes its work far better than I anticipated when I first viewed it; and I can, from several trials, on smooth and rough land, cheerfully recommend it to any one needing a first-rate article of this description."

These rakes are for sale by Messrs. Ruggles, Nourse, Mason, & Co., Quincy Hall, Boston; and by Mr. Charles Gill, Exeter, N. H.

REMEDY FOR THE POLL-EVIL.

In looking over the interesting pages of your paper, I have learned some very valuable recipes, for which I return you the following one, in exchange, viz.: one pint spirits turpentine, one half vial oil of spike, an ounce Spanish flies one ounce camphor, one ounce sal ammoniac pulverized; mix all together in a jug or bottle; let it stand about a week, and shake it well before using; make it almost boiling hot; after which pour it on the part afflicted; then heat in with a hot iron. Repeat this operation once a week for three weeks, keeping the horses in the dry.

Wetting Brick. — Few people, except builders, are aware of the advantage of wetting bricks before laying them. A wall twelve inches thick, built of good mortar, with brick well soaked, is stronger, in every respect, than one sixteen inches thick, built dry.

For the New England Farmer.

FERTILIZING INFLUENCE OF THE ATMOSPHERE.

Mr. Editor: Farmers are indebted, in a great measure, to atmospheric influences, in restoring their land to fertility. The continued cropping of land will reduce it to sterility, unless a constant stimulus be kept up by the application of manure; nor does it appear that manure of itself will prove a substitute for particular fertilizing elements derived from the air. Our knowledge of making manure is so limited that we are dependent upon the atmosphere to supply the deficiency, which our chemical knowledge is not adequate to perform, in composting our dung heaps. It is known to every experienced farmer, that his land will improve on having rest from exhausting crops; over stimulating produces premature decay; and land, like the animal or vegetable, stimulated to excess, will prematurely exhaust itself, and fall into decay. The fertilizing qualities derived from the atmosphere are not sent down in sudden showers, but the process is a gradual one: whether these fertilizers descend in the rain, frost, snow, or proceed from the winds, or are blessings unseen, which a drought produces, is a question I shall not attempt to answer.

The land must have rest at stated periods. In this time of rest, the air is administering its restoratives. In a time of drought, the land is unproductive, and consequently in a state of rest. It was said by an ancient farmer, that dry seasons would enrich his land equal to a good manuring. Be that as it may, after a succession of a few dry seasons, and on the return of rainy ones, I have seen the grass revive and grow on lands which previously had been almost barren, producing fine crops of a good quality without the aid of manure. In the twenty-fifth chapter of Leviticus, we find these directions from God himself to the children of Israel: "Six years thou shalt sow thy field, and six years thou shalt prune thy vineyard; but the seventh year shall be a Sabbath of rest unto the land;" "thou shalt neither sow thy field nor prune thy vineyard; and the Sabbath of the land shall be meat for you," — intimating that there should be great increase. It is not probable that God would have given these directions to the children of Israel, but for wise purposes. In this year of rest, the land was receiving a supply of "atmospheric influences" which tended to fertilize the soil by decomposing vegetable matter, or distributing their imperceptible fertilizers. It is to be wished that there could be some method contrived to enrich our land, less tedious and expensive than the never-ending and back-breaking process of composting manure.

Physiologists tell us that vegetables derive a considerable portion of their nutriment from the air. The ploughing in of grass crops would render the ground no benefit, if the nutriment which supplies the green crops was all derived from the earth, as the earth can restore nothing but its own. The same prolific principle, supplied from the air, which nourishes the growing plant, fertilizes the earth in its Sabbath of rest. I have an idea that the nutritive gases which escape from manure into the air, descend again to the earth, on meeting a condensing agent, and assist in the growth of vegetables, as well as fertilize the soil. The atmosphere is a magnificent chemical laboratory, where affinities, attractions, and combinations take place. Whatever this fertilizer may be, — whether nitre, ammonia, or some other agent, — we are much indebted to it for assisting us in making our fields more productive.

SILAS BROWN.

Wilmington, Mass., *Dec.* 22, 1849.

For the New England Farmer.

IMPROVING GRASS LANDS, &c.

Mr. Editor: I have read your paper with great profit and pleasure for the last year, and I promise myself the like advantage another year. I believe you have fully redeemed your promises to the public. There is a field in agriculture which is well occupied by the New England Farmer. I write now to express my sympathy in your views, and the object of your paper, and shall endeavor to gain for it more readers in Petersham. I wish you a happy new year, and many new subscribers and contributors.

I have some interest in farming, although my profession calls me to other pursuits. If it will not weary you too much, I will say, in few words, what I have done in the way of farming. I purchased, last year, some forty or fifty acres of land — pasture and mowing; the pasture grown up to brush, and the mowing run out. I have caused the pasture to be mowed *twice*, and thoroughly cleared up. By that operation, with the addition of "fixins," I can pasture four cows, where before I was told two could only be pastured. If you will remember, the early part of December, a year ago, was very mild. I improved it by buying manure and top-dressing some of the old mowings, which, I venture to say, for ten years had never known manure, save what was dropped by cattle feeding them down to the roots.

I made experiments of top-dressing with loam, and with horse and pig-pen manure, upon wet "runs" and high land. And my experience is very strongly in favor of this mode. Many have asked, in passing, why certain parts of the mowing seemed so green, when other parts were so brown and dry. I spread on a small square of a few rods some ten bushels of ashes; the grass *there* was almost three feet high; while all around the spot, with equal advantage — except the ashes — the grass was hardly five inches high in July. You may be sure that no theory against top-dressing shall prevent my pursuing a plan that works so well. Of course, I do not hope to renovate the land otherwise than by thorough ploughing. But it is idle to talk against the advantage of top-dressing, when properly done.

I will only add one experiment on making soil. I ploughed up a piece of land, formerly a barn-yard, and carted off on to the wet and uneven mowings the sods, and filled up hollows, grass side up. I then ploughed up the soil which was under the sod, and spread that also on the grass land. This last spring, I ploughed the spot over and over again, putting on ashes, charcoal, plaster, and privy manure, with long green manure from the cattle, and from that piece of land, stripped of sod and soil, I raised, by accurate calculation, at the rate of seventy-two bushels of corn to the acre; while in the field where I manured in the hill, besides spreading green manure, I could get only sixty-six bushels to the acre.

Mr. Editor, I want to make manure enough for ten acres of land. I have four cows and one horse, and have had, through last summer and spring, two pigs. How shall I do it?

JONAS AGRICOLA.

For the New England Farmer.

FOWLS.

Mr. Editor: Notwithstanding the subject of "fowls" has been pretty fairly discussed, for the past three months, I am induced, by a good feeling towards all poultry-raisers and venders, to offer a few remarks to add to this mooted subject. I consider myself among the number of those who have been keeping hens for profit, and can truly say that I feel

pretty well satisfied with the results. I consider myself amply paid for my trouble, with a clever net profit for my luck. I have raised no fowls to sell for an "extra price," nor any that I thought were suitable to offer for "public exhibition," although I have those among my flock of fowls which would be no discredit, when placed alongside of some that were offered for show and sale at the late Exhibition. I keep, on an average, one year with another, from twenty to twenty-five hens. They deposit from 2800 to 3000 eggs annually, besides raising from fifty to sixty chickens.

I have contented myself with keeping the pure-blooded, old-fashioned Yankee hens — those raised on Rhode Island soil.

This last fall, after having heard and read so much about the different breeds and varieties, I was induced to rise one step on the ladder, in order to be in the fashion; and, accordingly, I purchased a pair of the "Chitterpoats," a kind they tell me lay everlastingly, (and have no disposition to sit.) This is rather unnatural doctrine, but I'm bound to prove it by experience. I will give this breed a fair trial, and if they do not fulfil their "recommendation," I shall get rid of them; for, so far as size and beauty are concerned, my Yankee hens outdo them. I will venture to assert that I will select out one dozen of them, and a rooster to match, that will compete with the same number of most of those fancy breeds which brought $10 and $12 per pair at the late Exhibition; — that is, in the number of eggs and chickens in the course of a year.

"What's in a name?" The name *Yankee* here may not have so high-sounding title as the *Dorking*, Plymouth Rock, Cochin China, &c., &c.; but this is all owing to the familiarity of the name *Yankee*. It will not be many years before some of these new breeds of fowls will be in less demand. Many of them will not meet the purchaser's expectation. After having been fairly proved, those who have paid an "extra price" for some particular kind, may be glad to exchange, on our terms, for a pair of the old-fashioned barn-yard fowls. Every thing must be proved and judged by experience, to test its real value. The first introduction of a thing in market gives it a price, oftentimes, beyond its real value.

The Rohan potato, for instance, was eagerly sought after when it first made its appearance; but as soon as its qualities were tested, it was found *wanting* in those qualities which are found in good potatoes. It did not rank in the same neighborhood with the old-fashioned red and white potato. So it will be with many of the new breeds of fowls. Those who have paid as high as $15 for a pair of fowls, may, in less than five years, be glad to dispose of their whole "stock in trade" for that money.

It is not my design to discourage any one from purchasing whatever fowls he pleases; but my object simply is to build up the old-fashioned Yankee hen.

A. TODD.

SMITHFIELD, R. I., *Dec.*, 1849.

For the New England Farmer.

CHEAP DRAINING.

MR. EDITOR: I observe, in a late number, that you strongly recommend the adoption of tiles for draining purposes, and most properly, too; but the time required to introduce and establish tile-manufacturing will be necessarily so extended, as to justify my mentioning a very excellent substitute for the tile, which, with many of its greatest advantages, has, also, that of being within the reach of every one's power, as a recommendation.

About six years ago, I walked over one of the best farms belonging to the Duke of Portland, in the west of Scotland, when my attention was drawn to a field situated, as to natural conditions, similar to those around it. The latter had been all tile-drained, and was in excellent order. The former had been drained some thirty-two years previously, and looked equally well, although the trenches had been filled with *brushwood*, instead of tiles. Curiosity led me to open one of the drains so constructed, when I found the branches, therein deposited, in a remarkably sound state. I do not exactly know the organic structure of the soil; but my impression is, that it was formed from the debris of the *trap* formation, that prevailed in the locality. At the part of the brush drain opened, as well as at the outlets from each trench, the oxide of iron was liberally present; and what effect these natural circumstances would exercise on the preservation of the *brushwood*, I am not sufficiently acquainted with chemistry to show. Perhaps some of your scientific readers would furnish this information.

The practical conclusion I would draw from the foregoing is obvious. Farmers might avail themselves most conveniently of that material which they usually destroy by fire, and apply it to a permanently useful purpose. I say permanent; for it is well known that, so far as permanence is concerned, tiles do not, on an average, last more than twenty years, and the brush drains mentioned had worked well for thirty-two, and, I have no doubt, are working well at present — nearly forty years from the time they were constructed.

In the instance mentioned, the trenches were made two feet deep; but the soil was of an indurated character. Had the land been soft, or marshy, another six inches would have been necessary to make up for the subsidence of the soil, which always accompanies the withdrawal of water, and the solidifying of that part above the level of the drains.

The brush was chopped, so as to be placed in the trench evenly, and to the height of some twelve inches. The turf (inverted) was placed on the top, and *tramped* in, after which the trench was filled up.

I am not aware whether this system has been acted on or no. I furnish the fact on the supposition that it has not, and will be glad to find that I have been forestalled by practice.

I am, &c.,

A FIRESIDE FARMER.

BOSTON, *Dec.* 29, 1849.

REMARKS. — Since the introduction of subsoil ploughing, it has been a general custom, in England and in this country, to make drains about three feet deep, whether constructed of stones, tiles, or other substances, in order to allow of sufficient depth below the surface for subsoil ploughing. — *Ed.*

For the New England Farmer.

FRUIT — FOWLS.

FRIEND COLE: I am pleased that you sent me the New England Farmer, for one article is sometimes worth the cost of a volume. I think you have the right theory about the curculio sparing the plum-trees over paved ground. They know that they labor there in vain. This instinct of the insect is an important matter. I succeeded in raising a fine crop of Duane's purple plum, over a pavement, last year, after I had tried shaking the trees, and almost every other remedy, to no effect. I raised fine peaches last year, but no apples.

I have paid some attention to fowls. I like the Polands pretty well, for layers. Still, there is one great drawback on them, which I have never seen mentioned; therefore it may not be universal. I refer to their dying, from some imperfection in the formation of the egg, causing it to break in the body,

inducing violent inflammation, which generally proves fatal. What is the cause? Is it the incessant laying of this race, or are they a tender breed, and cannot stand the vicissitudes of the season? Some people say that they do not winter well. I think the defect I have named is not altogether owing to their excessive laying; for this evil attends them at the commencement of their laying. I am trying them this winter in a warm, plastered room, in order that they may be in an even temperature, and escape inflammation and fevers. If they do not succeed better than heretofore, I must give them up. My losses have been about one out of every four. I think that a cross of the Polands with the common fowl is better for laying than the pure Polands; but they die also. We now have some of the Shanghae, and mixtures; they do well. I say we, as my boy carries on the hennery.

I have been trying several years to make an "odd year" Baldwin. I obtained scions from a tree that bore large crops, invariably, in odd years. I set the scions in odd years, and then — odd enough — the first show of blossoms was in 1848. I picked off every blossom; and the tree blossomed tolerably well last spring, but it perfected only a few apples. Perhaps that was owing to the season; and my tree may yet be right. I fear not, however. We see by this how exceedingly strong is the disposition of the Baldwin to produce its fruit in even years. I think your odd-year Baldwin a fine affair. If I finally fail in this experiment, I shall be glad to avail myself of your aid in this matter. Yours, &c.,

ACTON. H. COWDRY.

REMARKS. — Several of the foreign breeds of fowls are rather tender, and the shells of their eggs are very thin. We think that this peculiarity is not owing to frequent laying, as we have had some races that laid only every second day, that laid eggs with shells so thin that we could not take them up, excepting with great care, without their breaking. Although the Poland fowls are distinguished as great layers, they require a warm place and extra care in winter, else they will not lay so well as our common hens, which are more hardy.

Unfavorable weather, the past season, is probably the reason that the Baldwin tree, under experiment, did not produce fruit, as it blossomed well. As to the year of grafting, even or odd, having an influence on the year of bearing, we have no facts or experiments; but as most early bearing trees come into bearing the third year after grafting, if the tree is rather old and thrifty, and other circumstances favorable, we should graft a tree in an even year, with a view to make it bear in odd years; as it would generally commence bearing in odd years, and so be likely to continue. This is, with us, hypothesis, and we should be pleased to hear the result of practice. We know of some cases that confirm the supposition, but there may also be cases to the contrary. Will our correspondents report facts that will throw light on the subject? — ED.

BUREAU OF AGRICULTURE.

The establishment of a "Bureau of Agriculture," at Washington, is a subject that has received considerable attention for the year past; and, as the President is disposed to encourage agricultural improvement, we hope that Congress will take up the matter, and do something for this great subject, that has been so long neglected by our government. Every other important branch of industry has received the fostering aid of Congress. Millions of dollars have been expended to encourage commerce, and the tariff has often been arranged with a view to protect manufactures. But agriculture, the foundation of all other arts, and far more extensive than all others, has received little or no attention; and the time was when this great branch of industry was not even named in the President's Message as a subject for action, and sometimes not even introduced into that important document incidentally.

But now the people demand that something shall be done for agriculture; and in obedience to this sovereign voice, something must be done. Our rulers should be wiser than the people, and anticipate their wants, and lead off in improvements; but in this particular they have been behind the age; yet we trust that they will respond favorably to the call that is now prevailing in every section of our country, to have legislative action in favor of agriculture.

At the late session of the Vermont legislature, a joint committee was appointed to inquire into this subject, of whom Hon. F. Holbrook, of Brattleboro', was chairman. This committee made the following able report, which was accepted by the legislature and approved by the governor: —

The founders of our government were desirous for the organization of a Home Department, devoted to the fostering and encouragement of agriculture, and other industrial arts; but it seems that for want of proper persons to organize and manage such a department, it was laid aside.

At a later period, Washington recommended an organization, entitled "A Home Department of Agriculture." His conceptions upon this subject — like every thing else emanating from his practical, far-seeing mind — are exactly to the purpose, comprehending, more or less directly, about all that need be said in its favor. They are as follows: —

"It will not be doubted that, with reference either to individual or national welfare, agriculture is of primary importance. In proportion as nations advance in population, and other circumstances of maturity, this truth becomes more apparent, and renders the cultivation of the soil *more and more an object of public patronage*. Institutions for promoting it grow up, supported by the public purse; *and to what object can it be dedicated with greater propriety?* Among the means which have been employed to this end, none have been attended with greater success than the establishment of Boards, composed of proper characters, charged with collecting and diffusing information, and enabled, by premiums and small pecuniary aid, to encourage and assist a spirit of discovery and improvement, by stimulating to enterprise and experiment, and by drawing to *a common centre*, the results every where of individual skill and observation, and by *spreading them thence over the whole nation*. Experience has accordingly shown that they are very cheap instruments of immense national benefits."

The methods of agriculture pursued by our fathers, in a new country, with a virgin soil and sparse population, were, perhaps, necessarily rude and improvident; but with a rapid, an unprecedented increase of population, improvements in tillage have not advanced with corresponding steps, or, generally speaking, been of long standing. By no more than a half century of bad cultivation, the soil of the older

states has become either entirely run down, or greatly impoverished of fertility; and insects, blights, noxious weeds, &c., the usual attendants of imperfect tillage, have increased and become accumulated to an alarming extent.

But the evil does not stop here. Too many of our intelligent, enterprising young men, observing the sad condition of the soil, and trained to false impressions, suppose that the agricultural profession, instead of being an open field for the efforts of science to improve, is but an arena, fit only to be occupied by the illiterate and unenterprising, under the guidance of blind tradition. They accordingly press in masses into other callings, filling them to overflowing, and leaving the "art of arts" to its fate.

The same process of deterioration, which has been so nearly completed in the Atlantic States, is now going on at the west. Although nature, by a long and a most liberal process, has endowed the lands of that section with a fertility elsewhere unknown, still they can be impoverished by the hand of man. The gradation to the same climax which has obtained in the older states, may be slower, yet, in the nature of things, it must be sure. Many of the occupants of those now generous soils, under the same mistaken impression that they are inexhaustible, which possessed the first settlers of the more fertile tracts of the Eastern States, will probably live long enough to find that, under a constantly depleting and careless husbandry, what has been done can be done again. These remarks are, of course, subject to exceptions; but they are still quite too generally true.

While this rapid destruction of fertility has been going on among us, several of the states of Europe have been as rapidly advancing in productiveness. There, agriculture is fostered and encouraged by government; men of the first attainments, and in the highest walks of life, devote their time and talents to its improvement; the lights of several sciences have been shed upon it; lands, under the cultivation of ages previous, have been so changed within sixty or seventy years past, by a judicious rotation of crops, and a system of manuring adapted to the soil and the crop, as to increase threefold in productiveness; thousands of acres of wet lands, heretofore of little or no value, have been drained, and are now under profitable cultivation; agricultural schools and colleges have been established; and the breeding of agricultural animals has been carried to so high perfection in England and Scotland, that any other breeds in the known world may be improved by a cross with them.

It may be said that such high cultivation cannot be profitable here. Neither can we afford to pursue *our* exhausting system of cultivation much further; for the decreased and decreasing crops will not remunerate our labor. If the state of things in our country will not warrant high farming, to the extent to which it is now carried in the countries spoken of, we certainly are warranted in the employment of far more enlightened and correct principles of tillage than are now common.

It has been well said, that "a prosperous agricultural district is not without patriots to defend it;" and it is undoubtedly true, that a high state of intelligence and scientific knowledge among our farmers, would conduce, more than any thing else, to the stability and perpetuity of our republic, and to the rapid and full development of its vast agricultural capabilities. We may truly say, in this connection, that "every accession which man gains to his knowledge, is also an accession to his power; and extends the limits of his empire over the world which he inhabits."

About three fourths of the population of our country are engaged in tilling the soil. Legislation to promote the prosperity of this interest, directly benefits the greater portion of the people; and indirectly, but not less surely, the remainder also. Now, our legislators and others have not been wanting heretofore in eulogy upon the antiquity, dignity, importance, and pleasures of agriculture; but where has been that fostering care which would seek to encourage and promote it? Where have the farmers been, who would demand for the cultivation of the soil that conspicuous place to which it is so justly entitled?

But we are happy to observe that an improved sentiment is becoming prevalent. That "agriculture *is* of *primary* importance;" that our nation has *already* "advanced in population, and other circumstances of maturity," to that position which "renders the cultivation of the soil an object of public patronage;" that there is no "object to which it can be dedicated with greater propriety;" — these truths are gradually making their way into the minds of intelligent, thinking men.

We have, at length, a Home Department; and the question presents itself, Can it, and will it, do any thing for agriculture? It can, and we trust that it will. The politicians *may* seek to make it an instrument for the furtherance of party; and, with the bugbear of "constitutional objections," they *may* tell us that nothing can be done for agriculture under this Department. But let the farmers, moving in a mass, call loudly for a Bureau of Agriculture, with proper and suitable patronage from the government. Let it be managed by "proper characters," selected with reference to their fitness for, and devotion to, the promotion of agriculture. They should be men above political contamination; and having a love for science for its own sake; and keeping constantly in view the one great object which they were placed there to promote, they would not be induced to "give up to party what was meant for mankind."

A Board of Agriculture, thus "composed of proper characters, charged with collecting and diffusing information, and enabled, by premiums and small pecuniary aid, to encourage and assist a spirit of discovery and improvement, by stimulating to enterprise and experiment, and by drawing to a common centre the results, every where, of individual skill and observation, and by spreading them thence over the whole nation," would soon be found to be "*a very cheap* instrument of immense national benefits."

1. This Board might be in correspondence with scientific men in all parts of our country, and with Boards of Agriculture in foreign countries, — thus drawing to a common centre, and from thence spreading broadcast over the land, all new facts and improvements of utility, all valuable suggestions, derived from the improvements and new lights of the various natural sciences which are intimately allied with agriculture.

2. Proper premiums might perhaps be offered to stimulate ingenuity, in the invention and production of the most valuable farm implements and machines; and by awarding to those which, upon proper test, were found best to answer a desired purpose, competition, and an ambition to excel, would be excited to the highest degree.

3. Persons in the employment of our government, abroad, might be directed to collect and transmit to the Department those new or improved seeds, fruits, plants, animals, implements, &c., which were deemed desirable. As it would be a part of the business of this Board to institute extensive inquiries into the utility of introducing, for cultivation among us, the various valuable productions of other countries; and as the great range of latitude, of soil and climate, which our country embraces, undoubtedly admits of cultivating the products of almost every other country; we may reasonably suppose, that a proper effort, in this direction alone, would be attended with very important results.

4. Premiums might be offered for the most able essays and the most satisfactory experiments to elucidate vexed questions and undeveloped principles in agriculture, — if deemed proper and desirable.

5. Extensive inquiries might be instituted into the habits of insects troublesome to cultivation, and the best methods to exterminate them, or prevent their ravages. As the nation "advances in population, and other circumstances of maturity," it becomes more and more an object, pecuniarily, with our cultivators, to raise many sorts of fruits, and tender plants, comparatively unimportant at an earlier period. Now, it is a fair estimate, that one half the productions of man, of this description, go to feed the insect world. Indeed, of some kinds, in some seasons, they take the whole. Their depredations upon the various field crops are oftentimes extensive, also. The subject of entomology is vast and inexhaustible; it requires such extensive, and yet particularly minute, and often microscopic, investigations, that the efforts of ordinary associations of men can avail but little. But it is believed that a National Board of Agriculture would have resources, peculiar to itself, that might effect important results. Its inquiries might be very extensive, drawing in contributions from individuals and societies, in every quarter, the sum total of which would be highly useful.

6. The various state and county societies throughout the land, might be in correspondence with the Department, — thus receiving and imparting information upon these and other subjects.

In short, in a hundred ways, such an organization might forward the great interests of agriculture. Indeed, we may conclude that no other establishment could parallel this, as a promoter of the interests, not exclusively of either section, but of the whole country.

The advocates for such a movement may, by some, be called enthusiasts. They are so; for the magnitude and importance of the thing very properly awaken them to enthusiasm. It is right that our own state of Vermont should be a foremost, a zealous pioneer in this business. Our people are an agricultural people; and they are awake to those measures which will foster and promote this commanding interest. Other states will join us in endeavoring to form an organization so desirable; — and thus the great sentiment of Washington, that "the power of the nation alone can carry out their high thought," will be realized.

In view of these considerations, your committee recommend the adoption of the accompanying Resolutions.

1. *Resolved*, That the General Assembly of Vermont earnestly recommend the establishment of a Bureau of Agriculture, in the "Department of the Interior" at Washington, whose province it shall be to superintend and promote the great interest of agricultural improvement in the nation.

2. *Resolved*, That the governor is requested to transmit a copy of the foregoing Resolution, and of the accompanying Report, to the President of the United States, to the Secretary of the Department of the Interior, to the Governor of each state of the Union, and to each of our senators and representatives in Congress, to the end that the attention of Congress, and of the several state legislatures, may be properly invited to the propositions embraced therein.

3. *Resolved*, That the senators and representatives of this state, in the Congress of the United States, are hereby requested to use their influence to procure the necessary legislation, by Congress, for the speedy establishment, on a firm and permanent basis, of a Bureau of Agriculture, as suggested in the first foregoing Resolution.

MANURING.

It is a beautifully wise and sublimely grand provision of Providence, that the decomposition and decay of all matter, both animal and vegetable, is so closely connected with reproduction, thus forming a continual transmigration of matter, and verifying practically that great truth in philosophy, that not a particle of matter can be lost, although it exists at different times in different forms. This transformation is going on constantly before our eyes, in the growth and decay of vegetables, trees, &c.; as, for instance, the plant that is growing luxuriantly in genial summer, imbibing nutriment from decomposing materials, will itself, in turn, mature, die, decay, decompose, and its elements contribute to the growth of successive vegetation in its vicinity.

These truths involve principles no less important or advantageous to the farmer than the moralist and the philosopher, as it comprehends manuring in all its variety; the only object of manure being to furnish nourishment to the growing plant, and whatever undergoes decomposition, whether animal, vegetable, or mineral, does that. Every farmer should be aware of the fact, that carbonic acid gas is actually necessary to the health and growth of vegetation, and that whatever furnishes this gas should be applied as manure as far as practicable. With this view of manures, I make it an object, when preparing new ground for cultivation, not to draw off any rotten or decayed wood that can be ploughed in, but rather to draw it on land where there is none, believing it to be as good manure as any other, although its effects may not be seen immediately. Every one who has cultivated a farm, must have observed that grain — Indian corn in particular — will grow much larger than usual near an old fence, or a rotten stump, or log, if there are any in the field. Now, it is evident that it is not owing to superior cultivation, that such is the case; but, on the contrary, land is seldom ploughed as good close to a fence, or around a stump or a log, as other places; and we are left to the conclusion that it is the nourishment they impart that produces such effects; and when we have arrived at such a conclusion, we cannot fail to see how much better it would be to apply such things as fallen leaves, rotten wood, and all other substances that emit carbonic acid gas during decay, as manure, than to leave them to waste their richness in an uncultivated place.

J. H. G.

Romulus, N. Y., 1849.

— *Philadelphia Dollar Newspaper.*

PLOUGHING THE PLAIN LANDS OF LONG ISLAND.

Dr. Peck states, that with the Worcester Eagle D plough, with three yoke of cattle attached, he has succeeded in ploughing these lands well, immediately after the wood was cut off, and without the previous operation of grubbing. This he has done at an expense of three dollars per acre, while the old grubbing process alone would have cost from twelve to sixteen dollars per acre. The trees and bushes cut off previous to ploughing, stood very thick on the land; and their roots, when he put the plough in, were not only of ordinary size, but green and tough. Many farmers came from his immediate neighborhood to see his ploughing, having little faith in removing scrub oak and pine stumps and roots in this summary way. We have only to add, that the manufacturers of these ploughs are now at work on a model which will be decidedly more efficient than the one used by Dr. Peck. As soon as some are finished, they will be sent to our warehouse, where we shall be glad to have the Long Island farmers, and any others interested in such matters, call and look at them. — *American Agriculturist.*

SAW-FLY OF THE RASPBERRY.

Selandria hoplocampa rubi.

A. Raspberry leaf, showing how it is eaten.
B. The caterpillar or worm state.
C. Cocoon of earth.
D. Perfect insect or fly.
E. The same at rest.

Miss Grace Darling, of New Haven, Ct., has politely furnished to us an excellent drawing, from which our engraving is made. We are much obliged for this valuable contribution to the science of entomology. On page 164 of our first volume is a very instructive article, from the same source, on this subject.

Saw-flies (*Tenthredinidæ*) are a numerous race of insects belonging to the order HYMENOPTERA. They are not stingers, but piercers, and are very destructive to vegetation, as they feed on the leaves of plants. Dr. Harris, the distinguished entomologist, remarks as follows of these insects: —

"But the most striking peculiarity of these insects consists in the double saws wherewith the females are provided. These are lodged in a deep chink under the hinder part of the body, like the blade of a penknife in its handle, and are covered by two narrow, scabbard-like pieces. The saws are two in number, placed side by side, with their ends directed backwards, and are so hinged to the under side of the body that they can be withdrawn from the chink, and moved up and down when in use. They vary in their form, and in the shape of their teeth, in different kinds of saw-flies; but they generally curve upwards and taper towards the end, and are toothed along the lower or convex edges. Each of the saws, like a carpenter's fine saw, has a back to steady it; the blade, however, is not fastened to the back, but slides backwards and forwards upon it. Moreover, the saw-blade is not only toothed on the edge, but is covered, on one side, with transverse rows of very fine teeth, giving to it the power of a rasp, as well as that of a saw.

"The female saw-flies use these ingeniously contrived tools to saw little slits in the stems and leaves of plants, wherein they afterwards drop their eggs. Some, it appears, lay their eggs in fruits; for Mr. Westwood discovered their young within apples that had fallen from the trees before they had grown to the size of walnuts. The wounds made in plants by some kinds of saw-flies swell, and produce galls or knobs, that serve for habitations and for food to their young. The eggs themselves, of all these flies, are found to grow, and increase to twice their former size after they are laid, probably by absorbing the sap of the plant through their thin shells. Most of the larvæ or young of the saw-flies strikingly resemble caterpillars, being usually of a cylindrical form, of a greenish color, and having several pairs of legs. Hence they are sometimes called false caterpillars."

In the communication referred to, Miss Darling remarks, that specimens of the saw-fly of the raspberry had been sent to Dr. Harris, of which he remarked as follows: —

"It appears to be an undescribed insect. It belongs to the genus *selandria*, and resembles in form and size the saw-fly of the rose, (*selandria blenocampa rosæ*,) but is referable to a different group of the genus called *hoplocampa* by Hartig, on account of the spines with which the larva is armed. The insect may be named *selandria* (*hoplocampa*) *rubi*, the latter term being given in allusion to the scientific name (*rubus*) of the raspberry."

There are various ways of destroying saw-flies. A solution of whale oil soap is usually effectual. It should be strong — one part of soap, in measure, to thirty-six parts of water. It should be applied after the sun is nearly down, or on a cloudy, but not rainy day, else, with the sun, it will destroy the foliage.

As the saw-fly of the raspberry resembles that of the rose, it may be destroyed in the same way; and on this subject Miss Darling observes, —

"I said, in my paper on the saw-fly of the raspberry, that the *rose* slug, being perfectly smooth, ashes or lime would not stick to them. On a more particular observation, I found that these slugs retired to the under side of the leaf during the night, and did not come out on the upper side of the leaf to eat until the dew was dried away; and by sifting ashes over the bushes very early in the morning, and repeating it every few days, I saved my bushes fresh and green, as the slugs did not find the ashes very palatable food, while my neighbor's bushes were very badly eaten."

Domestic Department.

MATERNAL INFLUENCE. — The mental fountain is unsealed to the eye of a mother, ere it has chosen a channel, or breathed a murmur. She may tinge with sweetness or bitterness the whole stream of future life. Other teachers have to contend with unhappy combinations of ideas. She rules the simple and plastic elements. Of her we may say, she "hath entered into the magazine of snow, and seen the treasure of the hail." In the moral field she is a privileged laborer. Ere the dews of morning begin to exhale, she is there. She breaks up a soil which the root of error and the thorns of prejudice have not preoccupied. She plants germs whose fruit is for eternity. While she feels that she is required to educate, not merely a virtuous member of society, but a Christian, an angel, a servant of the Most High, how does so holy a charge quicken piety, by teaching the heart its own insufficiency!

The soul of her infant is uncovered before her. She knows that the images which she enshrines in that unoccupied sanctuary must rise before her at the bar of doom. Trembling at such tremendous responsibility, she teaches the little being, whose life is her dearest care, of the God who made him; and who can measure the extent of a mother's lessons of piety, unless his hand might remove the veil which divides terrestrial things?

"When I was a little child," said a good man, "my mother used to bid me kneel beside her, and place her hand upon my head while she prayed. Ere I was old enough to know her worth, she died, and I was left too much to my own guidance. Like others, I was inclined to evil passions, but often felt myself checked, and, as it were, drawn back, by a soft hand upon my head. When a young man, I travelled in foreign lands, and was exposed to many temptations. But when I would have yielded, that *same hand was upon my head*, and I was saved. I seemed to feel its pressure as in days of my happy infancy, and sometimes there came with it a voice, to my heart a voice that must be obeyed — 'O, do not this wickedness, my son, nor sin against thy God.'" — *Michigan Farmer.*

TO KEEP SILK. — Silk articles should not be kept folded in white paper, as the chloride of lime used in bleaching the paper will probably impair the color of the silk. Brown or blue paper is better; the yellowish smooth India paper is best of all. Silk intended for a dress should not be kept in the house long before it is made up, as lying in the folds will have a tendency to impair its durability by causing it to cut or split, particularly if the silk has been thickened by gum. We knew an instance of a very elegant and costly thread-lace veil being found, on its arrival from France, cut into squares, (and therefore destroyed,) by being folded over a pasteboard card.

A white satin dress should be pinned up in blue paper, with coarse brown paper outside, sewed together at the edges.

The best way of keeping ribbons is to roll them round the blocks made for the purpose, and then wrap them in soft paper. You can easily obtain a few blocks from the stores where ribbons are sold. The block should be a little wider than the ribbon, that the edges may not be injured. When you have wound it smoothly around the block, secure the end of the ribbon with a little minikin pin. A large pin will leave holes, and perhaps green ones.

In rolling two pieces of ribbon round the same block, place the first end of the second piece *under* the last end of the first piece, otherwise there will be a ridge where the two came together. Take care, in rolling, not to make the slightest crease.

Never wrap silk or ribbon, or indeed any thing that is to be worn without washing, in printed paper, as the printing ink will rub off and soil it. — *Miss Leslie's House Book.*

Youth's Department.

ONE THING AT A TIME. — Step among your neighbors, reader, and see whether those among them who have got along smoothly, and accumulated property, and gained a good name, have not been men who bent themselves to one single branch of business; who brought all their powers to bear upon one point, and build on one foundation. It must be so.

Go out in the spring, when the sun is yet far distant, and you can scarcely feel the influence of his beams, scattered as they are over the wide face of creation; but collect those beams to a focus, and they kindle up a flame in an instant. So the man who squanders his talents and his strength on many things, will fail to make an impression with either; — but let him draw them to a point, let him strike at a single object, and it will yield before him.

TWO WAYS OF HEARING. — A clergyman of superior abilities preached a sermon on a certain occasion; and on his way home, his wife said to him, "My dear, that was a most miserable sermon; I think the poorest I ever heard from you." Some years after, he drew at random from his pile, and found that he had hit upon this very sermon. He preached it again. And as he was going home, his wife said to him, "My dear, you gave us a most excellent discourse to-day. I think I never heard you preach a better one." "My dear," said her husband, "you are the stupidest hearer I have ever known;" and then told her what she had said of this very discourse when he preached it before.

Health Department.

BATHING AND WASHING. — We have occasionally published articles on the importance of bathing and thorough washing. We now select from the Phrenological Journal a most excellent article on the mode of performing ablution according to different conditions of the system.

BATHING, WITH DIRECTIONS FOR ADAPTING ITS TEMPERATURE TO THE STATE OF THE PATIENT. — Of the utility of bathing, a very considerable portion of our communities are becoming so thoroughly convinced, that thousands practise it now where one adopted it ten years ago. The change is really astonishing. Mothers, by thousands, bathe or wash their children all over regularly. In the intelligent circles of Boston, for example, probably more bathe themselves and children than omit it. And this health-promoting practice is rapidly extending throughout villages and towns, so much that an inquiry touching the best *forms* of bath, their temperature, times, etc., is becoming quite desirable and important. Hence this article.

Many, hearing cold ablutions so highly recommended, try them, at first, perhaps, with benefit, but afterward with serious injury, which they attribute to the *bath*, whereas it belongs to the *temperature*.

For many years after I began to bathe daily, I received unmingled benefit therefrom, and a great amount of it. By and by, my system became so reduced by excessive mental application, that reaction did not always take place, and it injured me. I therefore took it less frequently, and only when I was sure I possessed sufficient vitality to secure that reaction. Under this regimen my skin became weaker and weaker, colds and slight fevers began to make their appearance, and I became apprehensive for the future, till Dr. North, of Saratoga, recommended not only the warm bath, but a *very* warm one; commencing at about ninety-eight degrees Fahrenheit, and rising, at successive baths, to one hundred and ten; remaining in from fifteen to thirty minutes, as I could bear it. "Never mind," said he, "if it prostrates you for the time being. You require that your blood should be brought to the *surface*, and this will do it, and thus fortify you against the winter's cold." He added this general rule, which struck me both as so reasonable and important, that I write this article mainly to promulgate it, namely — "When the system is over-excited, feverish, and requires to be reduced, take the *cold* bath; but when it is so debilitated as to require tonics, employ the *warm* bath." These warm baths did for me the very thing I required — namely, relieved my internal organs and head by directing the blood to the skin. A few hot baths so restored the action of the skin that it was benefited by the *cold* bath, which is always best when there is sufficient vitality in the system to produce the required reaction. He said he prescribed the *warm* bath instead of bitters, tonics, and stimulants — or where these were considered requisite in general practice; — but the *cold* bath where *depletion* and salivation were formerly prescribed; that is, where the pulse was hard, the skin feverish, and the system required to be *reduced*. And this rule is undoubtedly correct. It will generally be found to agree with the patient's *feelings* — and this is, after all, the great test.

Another important rule is this: Whenever the patient instinctively shrinks from *cold* water, because it really pains him, use the *tepid* bath; but when cold water produces an agreeable sensation, and leaves a pleasant glow, the cold bath is preferable. Mark, I do not say when the bather *thinks* cold water will produce a painful shock; for many imagine it will affect them unfavorably, whereas, properly applied, it would produce delightful sensations. When the skin is hot and the system restless, and whenever there is positive pain, local or general, apply cold water; but when you feel weak or exhausted, use the *warm* bath.

Those whose nerves are over-excited or diseased, should generally use the tepid bath, because their nerves require quiet; whereas the shock caused by cold water only re-irritates them, and thus enhances disease; whereas tepid water soothes the nerves, and carries off diseased matter, besides opening the pores.

Our general rule, then, is this; that temperature of bath *is* best which *feels* best to you. But mark these three important directions: 1. Always, after the warm bath, wash off in cold water; for this closes the pores, and helps prevent taking cold after them, besides bracing the system. 2. Always, when you wash or bathe in cold water, employ sufficient *action*, by swimming, or rubbing, or something else, to produce a subsequent *glow*; for this is indispensable, and its absence renders the bath injurious. 3. Keep up the circulation by subsequent *exercise*.

Many persons go shrinkingly and slowly into their baths. This is all wrong. Spring from your bed as though a great snake was crawling over you, jerk off your night clothes instantly, dash into the water as if for your life, rub as though you would blister your skin, wipe quickly, on with your clothes in double quick time, and go at something with might and main, till the blood courses briskly throughout your whole system, and you will feel almost like a new being.

The *quantity* of water bathed in is by no means unimportant. The body is charged with electricity, and water is a rapid conductor of this element. Hence none but robust persons should stay long in large bodies of water. One minute is too long for me to stay in a river, even in hot weather. Invalids should go only into *small* bodies of water, and will generally find the sponge, or hand bath, preferable, because small bodies of water become soon saturated with electricity, so that you can apply it the longer without its reducing the vital force below the reacting point.

Are warm or cold rooms best? Whichever *feels* best. When vigorous enough to insure reaction, I decidedly prefer cold rooms, and ice-cold water; but when not, warmer water and rooms. All these conditions each patient must determine for himself, and determine by that infallible guide, *his own sensations*. Yet let all employ *some* kind of bath, either daily, or, at farthest, semi-weekly.

Mechanics' Department, Arts, &c.

An Important Mechanical Invention for Casting Iron Pipes. — The Baltimore Sun notices at length an important improvement in casting iron pipe, at the foundery of Thomas J. Lovegrove, in that city, which is the invention of that gentleman. By the ordinary mode of casting pipe, it is necessary to make a sand mould for every separate piece of pipe, and a "core," which is formed by wrapping hay around a rod, this again being coated carefully with clay, to preserve the tubular or hollow form of the pipe. The improvement dispenses entirely with this tedious arrangement, and centrifugal power is applied to produce the same results in a quicker and better manner.

The invention consists of an iron mould, suspended horizontally, and arranged for the introduction of the melted metal, by means of a trough at one end. As the metal is introduced, a slight depression at one end is effected by means of suitable tackle, and the revolutions of the mould immediately commence. By the time all the metal is introduced, the mould is elevated to its true position, the gravitation having carried the fused metal to the end of the mould, and it suddenly revolves for about half a minute with considerable velocity, distributing the metal equally to the surface throughout the entire length of the mould, from the centrifugal force of the revolution. The vacancy in the centre is of course regulated by the amount of metal, the pipe being made of any degree of thickness required.

In a few seconds, the revolution ceases, the mould is separated, the upper half is hoisted off, and the pipe removed. There is no adhesion; the pipe, in the instant of cooling, undergoing contraction sufficient to obviate this, were there no artificial protection against it. The time occupied, from the tapping of the furnace to the lifting of the perfect pipe from the mould, is precisely two minutes. And it is obvious that, with a range of two or three moulds in operation, pipe could be turned out as rapidly as the metal could be drawn from the furnace. The invention will not be confined to the mere casting of iron pipe. It is evidently applicable in various departments, throughout the whole range of the mechanic arts. It is not limited in its effects, either, as we understand it, to a mere surface, but, while retaining a circular form, it will adapt itself to every variety of external shape and ornament. It is impossible to foresee the

wide range of service to which the principle may be adapted; for, susceptible as it is of application for the casting of iron pipe thin as sheet-iron, and adapted for stove-pipe, on the other hand it may be applied to the most colossal cylindrical work that art and science may require, multiplying it to any extent, immensely reducing the cost. Of the general pecuniary effect upon hollow cast-iron, there is ground to anticipate, from the use of this principle, an ultimate great depreciation of cost. — *Farmer and Mechanic.*

MACHINE FOR DRESSING STONE. — We saw tested, on Saturday last, a machine for dressing stone, invented by our worthy townsman, Capt. Robert Eastman; the entire success of its operation adding greatly to the already well-known reputation of its author. The machine has a rotary motion, and, by means of burrs or cutters, gives some millions of blows in a minute. These cutters are so constructed that they can be replenished at a cost of one and a half or two cents each — being the simple expense of renewing a stonecutter's chisel. We saw it dress a piece of common grindstone, cutting in about one inch in depth, and leaving a square edge and beautiful surface, as smooth as if cut by a chisel. A very important point is, that it will flute a column in marble, or prepare mouldings in any desirable form, with great beauty and expedition; doing its work as perfectly as is now done in the ordinary way. Jason Smith, of Troy, N. Y., has taken the agency for the United States, to whom all communications regarding it may be addressed. — *N. H. Patriot.*

ZINCOGRAPHIC PRINTING AND ENGRAVING IN COLORS. — We noticed, says the Philadelphia Ledger, a few days ago, the transfer of copper and steel engraving to zinc plates, by Mr. Bourquin. A German artist, Mr. Louis Rosenthal, has taken a step far in advance of this, and has presented for our inspection some beautiful specimens of zincographic printing and engraving in colors. The engravings are prepared upon zinc plates, by Rosenthal, from designs by artists. The printing in black from zinc plates, has been practised in Europe, but the mode of coloring is an invention of Mr. Rosenthal. One of the specimens is a hawthorn flower and fruit, from nature, arranged for an ornamental border, which has received ten different impressions, and is beautifully painted. Another is an original design of grass and flowers, arranged for cotton printing; another is a design in chalk of a frieze from an ancient painting at Pompeii. This is an important improvement in the arts.

ARTIFICIAL MAHOGANY. — The following method of giving any species of wood, of close grain, the appearance of mahogany in texture, density, and polish, is said to be practised in France, with such success that the best judges are incapable of distinguishing between the imitation and mahogany. The surface is first planed smooth, and the wood is then rubbed with a solution of nitrous acid. One ounce of dragon's blood is dissolved in nearly a pint of spirits of wine; this and one third of an ounce of carbonate of soda are then to be mixed together, and filtered, and the liquid, in this thin state, is to be laid on with a soft brush. This process is to be repeated, and in a short interval afterward the wood possesses the external appearance of mahogany. When the polish diminishes in brilliancy, it may be restored by the use of a little drawn linseed oil.

From the Transactions of the Essex Agricultural Society.

DAIRY MANAGEMENT.

[CONTINUED FROM PAGE 23.]

But one parcel of cheese was presented to the committee. This was such as to leave no hesitation as to the propriety of awarding the premium offered. If our recollection is right, a similar state of facts occurred the last year. Why it is that the farmers of Essex are so indifferent as to be unwilling to present their claims for this branch of the products of the dairy, we are unable to imagine. It cannot be that they have discontinued the making of cheese, for this will never happen while people have an inclination to use it. That it is still used, every well-furnished table bears testimony. That those farmers who live in the immediate vicinity of a ready market for milk or butter can turn it to better account than to make it into cheese, we have no doubt; but when two pounds of good cheese will readily command as much money as one pound of well-preserved butter, we think there are many farms on the sea-shore, and on the banks of the Merrimack, where their milk will be most advantageously used for the making of cheese. We remember to have seen splendid collections of cheese made in West Newbury and Andover; and if such are now there, we can only regret that they are not brought forward. Farmers should remember that they owe something to the public, as well as to themselves; and that they have not done their whole duty when they have simply pocketed the money offered as premiums. The design of these exhibitions is to present a fair specimen of the products of the county; and every one who has a spark of patriotism in his breast, should be willing to lend a helping hand. I wish those *good women* who labor and tug day after day in turning and rubbing their cheeses, would occasionally jog the elbows of their husbands, and urge them to go ahead in the way of their duty. Every man who loves his wife as he ought to do, will be proud to exhibit the products of her industry. If they will not, let the women themselves do as others we could name have creditably done — exhibit their own cheeses with their own hands. What more interesting part of the exhibition could there be, than to have the products of a dozen dairies, under the superintendence of the ladies themselves, ready to explain how they were made?

On looking over the statements, we were struck with the fact, that but *two* of the cows were of foreign breeds, (so called,) viz.: Mr. McNaughton's, of Byfield, whose produce was the seventh in quantity. These two were Durhams. There were no Ayrshires, no Devons — unless our natives may claim affinity thereto. Why it is that the farmers of Essex are so slow in introducing these classes of animals, we are unable to determine. Specimens of them have been among us, on the farms of Parsons, Derby, Poore, and others, for years, and many efforts have been made to make known their superiority; but still the real *hard hands* do not take hold of them. On whose judgment, then, shall we rely, the *gentlemen farmers*, or the *operative farmers?* The *theory* of one recommends the Durhams and the Ayrshires for the dairy, as being the greatest producers; the *practice* of the other adopts the natives. We leave this to be decided by those of more experience than ourselves. We are willing to prove all, and hold on upon the best.

One general remark must close what we have to offer on this subject; and our commentaries upon the statements particularly, must be appended to each.

The premiums are offered, not so much for the *superior quality* of the *article presented*, as for the *superior process* by which it is made so, that others may go and do likewise.

We recommend the premiums to be awarded as follows: —

For June Butter.

To Nathaniel Felton, of Danvers, first premium, $10
John Preston, of Danvers, second premium, 8
Elijah Pope, of Danvers, third premium, 6

For September Butter.

To Charles P. Preston, of Danvers, first premium, $10
Jonathan Berry, of Middleton, second premium, 8
Nathaniel Felton, of Danvers, third premium, 6

For Cheese.

To David Choate, of Essex, first premium, $8

In behalf of the Committee,
J. W. PROCTOR, *Chairman.*
DANVERS, *October* 25, 1849.

NOTES. — Butter made in Orange county, New York, has the highest reputation in the market — so much so, that most New York butter passes under that name. Here the *milk* is churned, and not the cream. It is said "to give a peculiar firmness and fineness of texture, and wax-like appearance when it is fractured, which butter made by churning the cream seldom or never has." The art of making *Orange County Butter* is said to be in the *women*, and not in the *cows* or *pastures*. You take a good *dairy-maid* from there, and she will make equally good butter hundreds of miles distant. In churning the *milk*, it takes about *one quarter part* more to produce a pound of butter, than it does when the cream is severed from the milk.

On examining the products of Mr. Hall's dairy, of Chemung county, who took the first premium in the N. Y. State Society, 1846, we find nineteen cows yielded three thousand one hundred and eighty-nine pounds of butter, in one hundred and eighty days, or about one hundred and sixty-eight pounds to a cow. In the same time, our fifty-six cows yielded nine thousand one hundred and seventy-four pounds of butter, or one hundred and sixty-four pounds to a cow. This comes so nearly up to the products of N. Y. state, that we are satisfied our farmers, by proper attention to selecting their cows for the dairy, can, if they will, do as well as the best. Let them apply their true Yankee tact in this matter, and they may challenge the world.

As a matter of curious information, we have collected, in a condensed form, the products of several of the most extraordinary cows in Massachusetts, that have come to our knowledge.

Date.	Name.	Place.	Weekly Produce.	Length of Time.
1827	Oakes Cow,	Danvers,	16 lbs.	16 weeks.
1834	Nourse Cow,	"	14 "	16 "
1838	Sanderson Cow,	Waltham,	14 "	16 "
1839	Homer's Cow,	Bedford,	14 "	12 "
1839	Hazeltine Cow,	Haverhill,	14 "	12 "
1839	Barrett Cow,	Northampton,	15 "	12 "
1845	Buxton Cow,	Danvers,	16 "	12 "

These cows show a product of more than two pounds per day, each, for a period of three months. We think it would be difficult to collect together such a herd.

STATEMENTS.

JOHN STONE, JR.'S STATEMENT.

To the Committee on Dairy.

GENTLEMEN: I present for your examination twenty-six pounds of butter, being a sample of two hundred and twenty pounds, made from the milk of four cows, in thirty-nine days, from the 1st of June to the 9th of July. During this time, we sold eight quarts of cream, and used one quart of milk a day in the family. We have ascertained that nine quarts of our milk yield one pound of butter, and that one quart of cream will make a pound of butter; consequently the produce of the four cows, in thirty-nine days, was equal to two hundred and thirty-two pounds, or one and a half pounds a day to each cow. Finding that our milk could be used to better advantage than in the making of butter, after the 20th of July we discontinued making; and therefore I cannot give an account of butter made in September. From the quantity of milk given by the cows in September, I am of the opinion that eight pounds of butter a week to each cow, could then have been made. Our cows had pasture feed only. Our pasture contains between four and five acres, gravelly bottom — has been ploughed and well cultivated. I have taken pains to select cows of good quality for butter-making. Three of my cows I obtained from Mr. Daniel Buxton, Jr., of Danvers, a man who has and does every thing in the best manner. The mother of this stock was remarkable for her milking properties. They are of the breed called Buffalo, without horns, and above the middling size. Two of them have not done so well this season as formerly; and I attribute it to their having been confined too closely during the winter. The old cow became farrow, and was killed at the age of thirteen years, weighing dressed six hundred pounds. I have several young animals of this stock. I am thus particular in stating these facts, because I consider them of the first importance in an attempt to establish a good dairy — a point at which I have been aiming for years.

Process of Making. — The milk is strained into tin pans and set in a cool cellar: when the cream is sufficiently risen, it is taken off and placed in stone pots. We churned twice a week this season. The buttermilk is worked out by hand, without the application of any water, and salted with an ounce of ground rock salt to a pound.

JOHN STONE, JR.
MARBLEHEAD, *Sept.* 26, 1849.

REMARKS. — Our curiosity being awakened by the account given by Mr. Stone, of his cows, we have learned, on inquiry, that the mother of this stock was purchased by Mr. James Wilson, from a drove, about twenty years since. Proving to be an excellent cow, her calves were raised and distributed in the neighborhood; and have uniformly been of superior quality. Many of them, by reason of associating with strangers, have lost their peculiarity of wanting horns, but still have good bags, well filled. Eight quarts of milk from these cows have produced a pound of butter; and when well fed, they have yielded sixteen quarts of milk per day. How important is it, when a person wants to have a good dairy, and can find a cow of this description, that her offspring should be reared! It is equally important, also, to take care with what animals she comes in contact; because the character of her offspring will depend very much on the company she keeps. We are fully persuaded that the milking properties depend quite as much upon the *male parent* as the *female*.

DANIEL PUTNAM'S STATEMENT.

To the Committee on Dairy.

GENTLEMEN: A firkin, containing twenty-seven pounds of June butter, a specimen of ninety-four pounds, made from the milk of six cows, in two weeks, averaging seven and five sixths pounds per week for each cow, is forwarded for your taste and judgment.

For some days, the milk was carefully measured at the time of straining, and it was found to require ten quarts of milk to make one pound of butter.

The process of making you have known in previous years, and I will merely say, that tin pans are used; cream is kept in large tin pails; churned twice a week; the butter is much rinsed in cold water, and one ounce of salt is allowed to each pound of butter; the cellar is airy and cool.

The chief requisitions in butter-making are known to be, the free and faithful use of soap and hot water

in the cleansing of the vessels used, and the separation of the buttermilk from the butter, after churning, with the hands; how far we may have been successful in the sample before you, remains (in part at least) for your decision.

The feed of the cows at the time the butter was made, was nothing more than a common pasture.

Very respectfully yours,
DANIEL PUTNAM.

DANVERS, *Sept.* 26, 1849.

REMARKS. — We were quite surprised when we found that, by the *tasting process*, Mr. Putnam's butter had not secured favor; and can only explain it upon the maxim that "the best may miss it sometimes." We certainly know that Mrs. Putnam and her daughters have often been successful in presenting the very best of butter. Our respect for their management of the dairy is equal to that of any other. We perceive that they apply water in getting out the buttermilk: possibly this may explain why their butter fell behind the butter of those to which no water was applied; and possibly the fault may have been in the imperfect taste of the judges, of which their statement has a slight indication of fearful apprehension.

ELIJAH POPE'S STATEMENT.

To the Committee on Dairy.

GENTLEMEN: I offer for your inspection a jar of June butter, containing twenty-five pounds, being a specimen of one hundred and twenty-seven pounds, made from the milk of four cows, from the 1st of June to the 5th of July.

Also, three boxes of September butter, containing twenty-two pounds, being a sample of four hundred and forty-five pounds, made between the 24th of May and 24th of September, from the same cows, with the addition of the milk of a two-year-old heifer, since the 23d of June.

Their feed has been common pasture, until the 20th of August; since that time, green corn fodder once a day.

Process of Making. — The milk is strained into tin pans; it stands in a cool cellar from thirty-six to forty-eight hours, when the cream is taken off, put into tin pails, and stirred every day.

We churn once a week. During the warmest weather, the cream is placed in the well, from twelve to twenty-four hours before churning. After it is churned, the buttermilk is thoroughly worked out, and the butter is salted with three fourths of an ounce of ground rock salt to the pound. After standing six hours, it is again worked and weighed, each pound separately.

ELIJAH POPE.

DANVERS, *Sept.* 26, 1849.

CHARLES P. PRESTON'S STATEMENT.

To the Committee on Dairy.

GENTLEMEN: I offer for your examination one pot of June butter, containing twenty-seven pounds, being a specimen of two hundred and eighty-eight pounds, made between the 1st of June and the 9th of July, from the milk of five cows, and four heifers three years old, all of native breed.

Also, two boxes of September butter, containing twenty-eight pounds — a sample of seven hundred and eighty-six pounds made between the 20th of May and 24th of September, from the milk of the same cows.

The cows have had common pasture feed until the 1st of August, when we commenced feeding with corn fodder, once a day.

Process of Making. — The milk is strained into tin pans, and placed in the cellar, where it stands from twenty-four to thirty-six hours; it is then skimmed, and the cream put in stone jars, and set in a vault made for the purpose. Churn twice a week. We are very particular to work every particle of the buttermilk out, and salt with one ounce of rock salt to the pound.

CHAS. P. PRESTON.

NORTH DANVERS, *Sept.* 25, 1849.

NATHANIEL FELTON'S STATEMENT.

To the Committee on Dairy.

GENTLEMEN: I present for your examination twenty-six pounds of butter made in June, and twenty-seven pounds of butter made in September, as samples of eight hundred and eighty-four pounds, made from the milk of eight cows and a heifer, in four months, from the 24th of May to the 24th of September. One of the cows has been in milk thirteen months. We have used milk in the family for ten persons, and regularly sold two gallons on each Saturday. Annexed is a statement of the quantity made each week. The cows had common pasture feed until the middle of August; then for a fortnight I gave them shorts, and continued to feed them with corn fodder while their feed was short in the pasture. I consider good pasture feed, with good spring water, the very best supply for the making of good butter. When this fails, I supply the vacancy with other things, that can be obtained with least inconvenience.

Process of Making. — The milk is strained into tin pans, and placed in a cool cellar, where it stands from thirty-six to forty-eight hours, when the cream is taken off, put into pails, and stirred daily. We churn once a week. During the warmest weather, the cream is hung in the well about twelve hours before churning. After the butter comes, the first thing to be done is to work out the buttermilk. This is done by hand, without the application of any water — believing such application to be no benefit, and in some respects injurious. About one ounce of best salt is usually applied to a pound, varying in some measure according to the condition of the butter, to be determined by the taste of the person working it. After standing about one hour, it is worked over a second time, and then weighed, each pound separately. The June butter was preserved by the application of a strong brine, made of common fine salt. I consider that I have used about the milk of eight cows through the season, for the making of butter, and that their average yield has been about *one pound of butter a day to each cow.** I find a great difference in the milk of different cows, in the making of butter; and in selecting cows for this purpose, make a point of ascertaining their butter-making qualities, by actual experiment with their milk.

NATHANIEL FELTON.

DANVERS, *Sept.* 26, 1849.

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* *Weekly Account of Butter made.*

May	24th	40	pounds.
"	31st	50	"
June	7th	50	"
"	14th	67	"
"	21st	55	"
"	28th	56	"
July	5th	58	"
"	12th	52	"
"	19th	45	"
"	26th	45	"
August	2d	40	"
"	9th	40	"
"	16th	42	"
"	25th	41	"
"	30th	43	"
Sept.	6th	42	"
"	18th	41	"
"	20th	42	"
"	24th	35	"
	Amounting to	884	"

DUNCAN McNAUGHTON'S STATEMENT.

To the Committee on Dairy.

The sample presented is one wood box, of twenty-five pounds, made in June, 1849. Milked five cows; made one hundred and twenty-one pounds in all. The cows were three natives and two Durhams, kept in a very ordinary pasture.

Method of Making.—The milk was strained into tin pails, and kept in a dairy cellar made for the purpose. The milk stands three days before it is skimmed, and the cream stands three days, (stirring it every day,) in a stone jar, before it is churned. Churn every third day. The butter is taken from the buttermilk, and worked through three waters, taken cool from the spring, until the buttermilk is entirely removed; then it is well salted, and remains one day, when it is worked over again, working out all the extra salt, and made into pound lumps. The churn is soaked and cooled with cold water from the spring before the cream is put into it.

Lot No. 2.—The sample is twenty-five pounds made this present month. Milked six cows, and made seventy-nine pounds from the 1st to the 22d of this month. The cows were three native and three Durham, kept principally in the same ordinary pasture, with a feed of corn fodder every evening. The care of the milk, the method of making the butter, is the same as No. 1, except that now the milk stands four days before it is skimmed, and the cream stands four days in the jar before it is churned. Churn every fourth day.

DUNCAN McNAUGHTON.

Byfield, *Sept.* 26, 1849.

Remarks.—This statement is not in exact conformity with the conditions on which the premiums are offered. One remark we would make is, inasmuch as Mr. M. appears to have been free in the application of *cold water* to his butter, its quality was not improved thereby. From all we can learn, our impression is very strong that such application is not beneficial. If any one entertains a different opinion, we hope next year they will exhibit a parcel of June butter, purified with water, that shall be worthy of the first premium. Until this is done, we think the chances will be in favor of the butter to which no water is applied.

JOHN PRESTON'S STATEMENT.

To the Committee on Dairy.

Gentlemen: I offer for your inspection one jar of June butter, containing twenty-six one half pounds, it being a sample of one hundred and seventy-one pounds, made between the 20th day of May and the 9th day of July, and of three hundred and sixty-five and three fourths pounds made between the 20th day of May and the 24th day of September.

I have milked four cows, all of native breed—one nine years old, two four years old, and one three years old. I have used in the family about four quarts of milk per day.

Their keeping has been common pasture, with corn fodder once a day since the middle of August.

Process of Making.—The milk is strained into tin pans, and set on the bottom of a cool cellar, where it remains from twenty-four to thirty-six hours. The cream is put in stone pots. We churn once a week. The buttermilk is thoroughly worked out, and the butter is salted with one ounce of rock salt to the pound.

JOHN PRESTON.

North Danvers, *Sept.* 27, 1849.

DAVID CHOATE'S STATEMENT.

To the Committee on Dairy.

Gentlemen: I offer, for your inspection, sixty-six and one half pounds of new milk cheese, being a sample of eight hundred pounds made between the 1st day of June and the 1st of August last. We had seven cows in milk during that time. After the 10th of August we milk nine.

The whole produce of the dairy has been as follows, viz.: eight hundred pounds of new milk cheese, as above, and forty-four pounds of four meal do., with a small quantity of an inferior kind; also, two hundred and nineteen pounds of butter. The butter has been chiefly made since the 1st of August.

The farm is situated upon Hog Island, so called, in this town, and has suffered from drought and from grasshoppers beyond any former year. The cows had no feed beside what they found in the pasture, until about the 10th of September, after which time they were occasionally let into the mowing grounds a few hours in the day. All the cows are of native breed, except one of the two which we began to milk about the 10th of August. This cow has had a quart of meal a day for ten or twelve days past only.

The whole number of new milk cheeses made is fifty-five. In making the first twenty-three, the night's milk was made blood warm, after taking off the cream in the morning; after which, the milk of both night and morning, with the cream of the night milk, was put together, and the rennet put in as usual, at the rate of half a pint to eight pails of milk. The other thirty-two cheeses were managed somewhat differently. A curd was made of the night's milk immediately after drawing it. This was left to drain through the night, and was mixed with the curd of the next morning. The quantity of rennet was the same as before, and the salt in both cases was a tea-cup full of the ground rock salt to a cheese of about fifteen pounds weight. We press from twenty-four to thirty hours. Milk has been used freely in the family through the summer, say about five quarts a day.

DAVID CHOATE.

Essex, *Sept.* 26, 1849.

[To be concluded in next number.]

LONG VITALITY OF SEEDS.

So completely is the ground impregnated with seeds, that if earth is brought to the surface from the lowest depths at which it is found, some vegetable matter will spring from it. I have always considered this fact as one of the many surprising instances of the power and bounty of Almighty God, who has thus literally filled the earth with his goodness, by storing up a deposit of useful seeds in its depths, where they must have lain through a succession of ages, only requiring the energies of man to bring them into action. In boring for water lately, at a spot near Kingston on the Thames, some earth was brought up from a depth of three hundred and sixty feet; this earth was carefully covered over with a hand glass, to prevent the possibility of any other seeds being deposited upon it; yet in a short time plants vegetated from it. If quicklime be put upon land which from time immemorial has produced nothing but heather, the heather will be killed, and white clover spring up in its place. A curious fact was communicated to me respecting some land which surrounded an old castle, formerly belonging to the Regent Murry, near Moffat. On removing the peat, which is about six or eight inches in thickness, a stratum of soil appears, which is supposed to have been a cultivated garden in the time of the regent, and from which a variety of flowers and plants spring some of them little known even at this time in Scotland.

NOTICES OF PUBLICATIONS.

The Albany Cultivator. — This paper, which has long held a very prominent position among the most valuable publications of our country, has, accompanying the January number, a very beautiful pictorial number, made up of numerous engravings that have appeared in that work, arranged in good taste, and very handsomely executed.

The Rural New Yorker. — This is a large sheet, in quarto form, published and conducted by D. D. T. Moore, Rochester, N. Y., late publisher and associate editor of the Genesee Farmer. It is devoted to agriculture, horticulture, and miscellaneous intelligence. As this work is ably conducted, handsomely illustrated, and neatly executed, it is well worthy of an extensive patronage; and from brother Moore's enterprise, we have no doubt it will receive it. Weekly, at $2 per year.

Transactions of the Worcester Agricultural Society. — We are indebted to Col. J. W. Lincoln for this pamphlet, containing forty-eight pages, embracing various reports and essays, from which we shall make some extracts.

Pathfinder Railway Guide for January. Price five cents.

URINE OF ANIMALS.

I have thought that, as a general thing, our farmers do not consider sufficiently the value of this excellent agent of fertility. In how few instances, indeed, do we find any effort made to economize it, or render its great wealth available for the sustenance and support of vegetable life. According to an English agricultural author of great intelligence, the quantity of liquid manure produced by a single cow in one year, is equal to fertilizing one and one fourth acres of soil, producing effects as permanent as do the solid excrements voided by the same animal in a like interval of time. A cord of good loam thoroughly saturated with this energetic and fecundating liquid, he estimates as equal, for all practical purposes, to a cord of the best, well-rotted manure. If the liquid and solid evacuations, including the straw or other materials used as litter, are kept separate, and soaking up the former by absorbent loam, previously well dried, it has been found that they will manure land, in proportion by bulk, of seven liquid to six solid, while their actual value is as two to one. One hundred pounds of cow's urine, says our authority, produce thirty-five pounds of the most powerful salts which have ever been applied in agriculture. No one, therefore, can doubt for one moment, that by neglecting to economize this powerful and valuable agent of agrestic enrichment, we deprive ourselves of an agent at once the most energetic in its action, and the most decidedly salutary in its permanent effects. If the liquid evacuations of our stock equal one half the value of the solid excrement, and if there be any dependence to be relied on the recent experiments of chemical men, this is a very moderate appraisal. Is it not richly worth saving?

A NEW CORRESPONDENT.

Philadelphia County, *Nov.* 12, 1849.

— *Germantown Telegraph.*

One kind act does more towards softening man's stubborn nature than all the sour looks and harsh language ever used.

THE OLD ARM-CHAIR.

BY ELIZA COOK.

I love it, I love it; and who shall dare
To chide me for loving that old arm-chair?
I've treasured it long as a sainted prize,
I've bedewed it with tears, and embalmed it with sighs;
'Tis bound by a thousand bands to my heart;
Not a tie will break, not a link will start.
Would ye learn the spell? A mother sat there,
And a sacred thing is that old arm-chair.

In childhood's hour I lingered near
The hallowed seat with listening ear;
And gentle words that mother would give,
To fit me to die, and teach me to live.
She told me shame would never betide,
With truth for my creed, and God for my guide;
She taught me to lisp my earliest prayer,
As I knelt beside that old arm-chair.

I sat and watched her many a day,
When her eye grew dim, and her locks were gray;
And I almost worshipped her when she smiled,
And turned from her Bible to bless her child.
Years rolled on, but the last one sped —
My idol was shattered, my earth-star fled;
I learnt how much the heart can bear,
When I saw her die in that old arm-chair.

'Tis past! 'tis past! but I gaze on it now
With quivering breath and throbbing brow;
'Twas there she nursed me, 'twas there she died;
And memory flows with lava tide.
Say it is folly, and deem me weak,
While the scalding drops start down my cheek;
But I love it, I love it, and cannot tear
My soul from a mother's old arm-chair.

THE OLIO.

Industry. — As the sweetest rose grows upon the sharpest prickle, so the hardest labor brings forth the sweetest profits.

True religion will show its influence in every part of our conduct; it is like the sap of a living tree, which penetrates the most distant boughs.

The soul of man, when contemplating God, is like a cloud at close of day, receiving glorious tints of beauty as it floats in the smile of the sun.

"Tell your father," said John Randolph to a young friend, "that I recommend abstinence from novel reading and whiskey punch. Depend upon it, sir, they are both equally injurious to the brain."

The more a man works, the less time he will have to grumble about hard times.

TERMS. — The New England Farmer is published every other Saturday, making a neat and handsome volume, at the close of the year, of 416 pages, at $1 a year, or five copies for $4, payable in advance. It may be neatly bound at 18¾ cents, or elegantly bound in muslin, embossed and gilt, at 25 cents a volume. As it is stereotyped, back numbers can be furnished to new subscribers.

The Postage

On this paper is only 1 cent, or 26 cents a year, within the state, or within 100 miles out of the state; and 1½ cents, or 39 cents a year, beyond those distances.

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BOSTON STEREOTYPE FOUNDRY.